

PCT

RAW SEQUENCE LISTING DATE: 10/08/2004
PATENT APPLICATION: US/10/509,599 TIME: 10:26:48

Input Set : D:\seqlist.txt

```
3 <110> APPLICANT: Delaney, Allen
            5 <120> TITLE OF INVENTION: Cancer Associated Protein Kinases and their Uses
            7 <130> FILE REFERENCE: SMAR-043
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/509,599
C--> 9 <141> CURRENT FILING DATE: 2004-09-28
            9 <150> PRIOR APPLICATION NUMBER: 60/368,853
          10 <151> PRIOR FILING DATE: 2002-03-28.
          12 <150> PRIOR APPLICATION NUMBER: PCT/CA03/00409
          13 <151> PRIOR FILING DATE: 2003-03-21
                                                                                                                                          15 <160> NUMBER OF SEQ ID NOS: 28
          17 <170> SOFTWARE: FastSEQ for Windows Version 4.0
          19 <210> SEQ ID NO: 1
          20 <211> LENGTH: 525
          21 <212> TYPE: DNA
          22 <213> ORGANISM: Homo sapiens
                                                                                                                                          A10 mg 140 mg
                                                                                                                                          The second secon
          24 <220> FEATURE:
          25 <221> NAME/KEY: misc feature
          26 <222> LOCATION: (0)...(0)
          27 <223> OTHER INFORMATION: HSM801163 kinase polynucleotide
          29 <400> SEQUENCE: 1
          30 atgtggcagg gccttacgac catctctgct gatgaggaga cccttactga tcattatagg 60
          31 ctcctcgaga tcatcagcca ggacagettc accagggtga atgaagttca ccaagtacct 120
          32 teteaetggg cagcaaaggg ggatatecat agggacetga ageccaagaa ttteettgtg 180
          33 gtccatcaca acataaaaat aacagacttt ggatttgata ccaggttcac tgtaggccag 240
          34 aagetgggea cettegttae aegtttgtta getgttttgg agecaactte tggagaeagt 300
          35 atttgcaagt ctgcatgcag gccgagaaaa cggaaaggca catgccttcc tggcatagca 360
          36 ttagccagaa ctcagtgctt tggtctagtc ccagagaggt ggctggtgcc acctttgcca 420
          37 ggacctgtgg ctgatcagct gctccctatt gttgccacaa taaaggattc tggcttttct 480
          38 aaggagaga agatgccaga tcccaggccc acatgtttgg gatag
          40 <210> SEQ ID NO: 2
          41 <211> LENGTH: 174
          42 <212> TYPE: PRT
          43 <213> ORGANISM: Homo sapiens
          45 <220> FEATURE:
          46 <221> NAME/KEY: UNSURE
          47 <222> LOCATION: (0)...(0)
          48 <223> OTHER INFORMATION: HSM801163 kinase polypeptide
          50 <400> SEQUENCE: 2
          51 Met Trp Gln Gly Leu Thr Thr Ile Ser Ala Asp Glu Glu Thr Leu Thr
                                                                                            10
          53 Asp His Tyr Arg Leu Leu Glu Ile Ile Ser Gln Asp Ser Phe Thr Arg
          55 Val Asn Glu Val His Gln Val Pro Ser His Trp Ala Ala Lys Gly Asp
```

RAW SEQUENCE LISTING DATE: 10/08/2004 PATENT APPLICATION: US/10/509,599 TIME: 10:26:48

Input Set : D:\seqlist.txt

```
56
57 Ile His Arg Asp Leu Lys Pro Lys Asn Phe Leu Val Val His His Asn
59 Ile Lys Ile Thr Asp Phe Gly Phe Asp Thr Arg Phe Thr Val Gly Gln
60 65
                       70
                                           75
61 Lys Leu Gly Thr Phe Val Thr Arg Leu Leu Ala Val Leu Glu Pro Thr
                                       90
63 Ser Gly Asp Ser Ile Cys Lys Ser Ala Cys Arg Pro Arg Lys Arg Lys
               100
                                   105
64
65 Gly Thr Cys Leu Pro Gly Ile Ala Leu Ala Arg Thr Gln Cys Phe Gly
66
          115
                               120
                                                   125
67 Leu Val Pro Glu Arg Trp Leu Val Pro Pro Leu Pro Gly Pro Val Ala
                           135
69 Asp Gln Leu Leu Pro Ile Val Ala Thr Ile Lys Asp Ser Gly Phe Ser
                       150
                                           155
71 Lys Glu Arg Glu Met Pro Asp Pro Arg Pro Thr Cys Leu Gly
72
                   165
74 <210> SEQ ID NO: 3
75 <211> LENGTH: 1242
76 <212> TYPE: DNA
77 <213> ORGANISM: Homo sapiens
79 <220> FEATURE:
80 <221> NAME/KEY: misc_feature
81 <222> LOCATION: (0)...(0)
82 <223> OTHER INFORMATION: PCTK3 kinase DNA
84 <400> SEQUENCE: 3
85 aagaggetet etetgeeeat ggatateege etgeeeeagg aatteetaea gaagetaeag 60
86 atggagagec cagatetgec caageegete ageegeatgt ceegeeggge etecetgtea 120
87 gacattggct ttgggaaact ggaaacatac gtgaaactgg acaaactggg agagggcacc 180
88 tatgccacag tcttcaaagg gcgcagcaaa ctgacggaga accttgtggc cctgaaagag 240
89 atccggctgg agcacgagga gggagcgccc tgcactgcca tccgagaggt gtctctgctg 300
90 aagaacetga agcacgecaa tattgtgace etgeatgace teatecacae agateggtee 360
91 ctcaccctgg tgtttgagta cctggacagt gacctgaagc agtatctgga ccactgtggg 420
92 aaceteatga geatgeacaa egteaagatt tteatgttee agetgeteeg gggeetegee 480
93 tactgtcaca cccgcaagat cctgcaccgg gacctgaagc cccagaacct gctcatcaac 540
94 gagagggggg agctgaagct ggccgacttt ggactggcca gggccaagtc agtgcccaca 600
95 aagacttact ccaatgaggt ggtgaccctg tggtacaggc cccccgatgt gctgctggga 660
96 tccacagagt actccaccc cattgctatg tggggcgtgg gctgcatcca ctacgagatg 720
97 gecacaggga ggcccctctt cccgggctcc acagtcaagg aggagctgca cctcatcttt 780
98 cgcctcctcg ggacccccac agaagagacg tggcccggcg tgaccgcctt ctctgagttc 840
99 egcacetaca getteceetg etaceteeeg eageegetea teaaceaege geceaggttg 900
100 gatacggatg gcatccacct cctgagcagc ctgctcgtgt atgaatccaa gagtcgcatg 960
101 tcagcagagg ctgccctgag tcactcctac ttccggtctc tgggagagcg tgtgcaccag 1020
102 cttgaagaca ctgcctccat cttctccctg aaggagatcc agctccagaa ggacccaggc 1080
103 taccgaggct tggccttcca gcagccagga cgagggaaga acaggcggca gagcatcttc 1140
104 tgagccacgc ccaccttgct gtggccaagg gacaagagac cacatggagc acaaattcgg 1200
105 gtaggatgga gcctgtgtgg ccctcggagg actgaacaac cc
107 <210> SEQ ID NO: 4
108 <211> LENGTH: 380
```

RAW SEQUENCE LISTING DATE: 10/08/2004 PATENT APPLICATION: US/10/509,599 TIME: 10:26:48

Input Set : D:\seqlist.txt

	•															
109	<212	?> T	PE:	PRT							-					
110	<213	3 > OF	RGAN :	ISM:	Homo	sar	piens	3								
112	<220)> FE	EATU	RE:												
113	<221	L> NA	ME/I	KEY:	UNSURE											
114	<222> LOCATION: (0)(0)															
115	<223> OTHER INFORMATION: PCTK3 kinase polypeptide															
117	<400)> SE	EQUE	NCE:	4											
118	Lys	Arg	Leu	Ser	Leu	Pro	Met	Asp	Ile	Arg	Leu	Pro	Gln	Glu	Phe	Leu
119	1	_			5			_		10					15	
120	Gln	Lys	Leu	Gln	Met	Glu	Ser	Pro	Asp	Leu	Pro	Lys	Pro	Leu	Ser	Arg
121				20					25					30		
122	Met	Ser	Arg	Arg	Ala	Ser	Leu	Ser	Asp	Ile	Gly	Phe	Gly	Lys	Leu	Glu
123			35					40					45			
124	Thr	Tyr	Val	Lys	Leu	Asp	Lys	Leu	Gly	Glu	Gly	Thr	Tyr	Ala	Thr	Val
125		50					55					60				
126	Phe	Lys	Gly	Arg	Ser	Lys	Leu	Thr	Glu	Asn	Leu	Val	Ala	Leu	Lys	Glu
127	65					70					75 ·					80
128	Ile	Arg	Leu	Glu	His	Glu	Glu	Gly	Ala	Pro	Cys	Thr	Ala	Ile	Arg	Glu
129					85					90					95	
130	Val	Ser	Leu	Leu	Lys	Asn	Leu	Lys	His	Ala	Asn	Ile	Val	Thr	Leu	His
131				100					105					110		
132	Asp	Leu	Ile	His	Thr	Asp	Arg	Ser	Leu	Thr	Leu	Val	Phe	Glu	Tyr	Leu
133			115					120					125			
134	Asp	Ser	Asp	Leu	Lys	Gln	Tyr	Leu	Asp	His	Cys	Gly	Asn	Leu	Met	Ser
135		130					135					140				
.136	Met	His	Asn	Val	Lys	Ile	Phe	Met	Phe	Gln	Leu	Leu	Arg	Gly	Leu	Ala
137	145					150				•	155					160
138	Tyr	Cys	His	Thr	Arg	Lys	Ile	Leu	His	Arg	Asp	Leu	Lys	Pro	Gln	Asn
139					165					170					175	
140	Leu	Leu	Ile			Arg	Gly	Glu	Leu	Lys	Leu	Ala	Asp	Phe	Gly	Leu
141				180					185					190	_	_
	Ala	Arg		Lys	Ser	Val	Pro		Lys	Thr	Tyr	Ser		Glu	Val	Val
143			195					200				_	205			
	Thr		\mathtt{Trp}	Tyr	Arg	Pro		Asp	Val	Leu	Leu	_	Ser	Thr	Glu	Tyr
145		210					215				_	220	•			
		Thr	Pro	Ile	Ala		Trp	Gly	Val	Gly		Ile	Hıs	Tyr	Glu	
147				_	_	230	_,	_		_	235		_^		~3	240
	Ala	Thr	GIĀ	Arg		Leu	Phe	Pro	Gly		Thr	Val	Lys	GIu		Leu
149		_	_,	1	245	_	_	~1	1	250	_,	~-7	~7	m1	255	
	His	Leu	тте		Arg	Leu	Leu	GLY	Thr	Pro	Thr	GIu	GIU		Trp	Pro
151	~7		_,	260	_,			_,	265	_,	_0		_,	270	~	_
	GLY	Val		Ala	Phe	Ser	GIu		Arg	Thr	Tyr	Ser		Pro	Cys	Tyr
153	_	_	275		_		_	280		_	_		285	_, .	_	~ 7
	Leu		GIn	Pro	Leu	ile		His	Ala	Pro	Arg		Asp	Thr	Asp	Gly
155		290	_			•	295	_		_	~ 7	300		•		24.
		His	Leu	ьeu	ser		ьeu	ьeu	Val	Tyr		Ser	гуѕ	ser	Arg	
157			~7			310				_	315			T	a 3 -	320
	ser	ALa	GIU	Ala		ьeu	ser	HIS	Ser		Pne	arg	ser	ьeu		GIU
159					325					330					335	

RAW SEQUENCE LISTING DATE: 10/08/2004
PATENT APPLICATION: US/10/509,599 TIME: 10:26:48

Input Set : D:\seqlist.txt

```
160 Arg Val His Gln Leu Glu Asp Thr Ala Ser Ile Phe Ser Leu Lys Glu
161
                340
                                    345
162 Ile Gln Leu Gln Lys Asp Pro Gly Tyr Arg Gly Leu Ala Phe Gln Gln
163
            355
                                360
164 Pro Gly Arg Gly Lys Asn Arg Arg Gln Ser Ile Phe
167 <210> SEQ ID NO: 5
168 <211> LENGTH: 4957
169 <212> TYPE: DNA
170 <213> ORGANISM: Homo sapiens
172 <220> FEATURE:
173 <221> NAME/KEY: misc feature
174 <222> LOCATION: (0)...(0)
175 <223> OTHER INFORMATION: PFTK1 kinase DNA
177 <400> SEQUENCE: 5
178 gcatcccctt gattaaatgt ttttcctcct atgcaatcac cattagctgt ttggctccca 60
179 ttctgtattc ttctgaagca gccctgcatt gcaaatcaat atctttctga aaagacagtg 120
180 tgttgtgaat tgccttgaca gcatatgcac ggttactttg gctgcaatgc tgctgcagag 180
181 cccggttact ctgccttcgt gggaactcca cagatatgtg tcacaaagat gtctacacgg 240
182 aactgccagg gaatggactc agtgatcaaa cccctggaca caattcctga ggataaaaaa 300
183 gtcagagttc agaggacaca gagcactttt gacccatttg agaaaccagc taatcaagta 360
184 aagagggtgc attctgagaa caatgcttgc attaacttta agacctcctc cactggcaaa 420
185 gagtcaccta aagttaggcg gcactccagc cccagctcgc caacaagtcc caaatttgga 480
186 aaagctgact catatgaaaa gctggaaaaa ctaggggaag gatcttatgc tacagtatac 540
187 aaagggaaaa gcaaggtaaa tgggaagttg gtagctctga aggtgatcag gctgcaggaa 600
188 gaagaaggga cacctttcac agctatcagg gaagcttctc ttttaaaagg actaaaacat 660
189 gctaacatag tgctacttca tgacatcatc cataccaagg agacgctgac acttgtgttt 720
190 gaatatgtgc acactgattt atgtcagtac atggacaagc accctggggg gctgcatcca 780
191 gataatgtga agttgttttt atttcagttg ctgcgaggtc tgtcttacat ccaccagcgt 840
192 tatattttgc acagagacct gaaaccacag aaccttctga tcagtgacac gggggagtta 900
193 aaqctggcag atttcggtct tgcaagagca aaatccgtcc ctagccacac atactccaac 960
194 qaagtggtta ccttgtggta cagacctcca gatgtccttc taggctcaac agaatattcc 1020
195 acctgccttg acatgtgggg agtaggttgc atctttgttg aaatgatcca aggagttgct 1080
196 gcttttccag gaatgaaaga cattcaggat caacttgaac gaatatttct ggttcttgga 1140
197 acaccaaatg aggacacatg gcctggagtt cattetttac cacattttaa gccagaacgc 1200
198 tttaccctqt acagctctaa aaaccttaga caagcatgga ataagctcag ctatgtgaac 1260
199 catgcaqaqq acctqqcctc caagctccta caatgttccc caaagaacag actgtcggca 1320
200 caggetgeet tgagecaega gtattttagt gaeetgeege caeggetatg ggaaeteaee 1380
201 gacatgtctt ctatttttac tgtcccaaat gtgagattgc aaccagaagc tggagaaagc 1440
202 atgcgggcct ttgggaaaaa caatagttat ggcaaaagtc tatcaaacag caagcactga 1500
203 caagcagcac attctcaaga gcacacagga ttaagttgtc atcattctgg gaagaaaaaa 1560
204 aaaacattaa tgaagaggcc aataatatga agggaatcat ggatcagttt tctttcgctc 1620
205 cctgtggtgg atttcactta caagaaaatt gaagctggca agaccctgtt ttctctgcaa 1680
206 tttatttaaa accttgcacg catttggata ccttgtgatt tccaagaact acgtgaagat 1740
207 taagetttge ttactgatae atggeatgta ttetttteag tettttgtgt ttgattttgt 1800
208 ttgatitece tetgeageae agegtetetg taaaggtttt tatgetttea ceagecatgt 1860
209 cttaaataca ttaagacaac acatttggtg ttcacacttc ttcagtaatg tctgaacttg 1920
210 aaagccacag agtggcataa aacaatgtgt gttttctttg agagcagtgc acattttgca 1980
211 accactagga aggaaatttt ctgctaaagc aaacccctgt tctctgactt gacaacttgg 2040
```

RAW SEQUENCE LISTING DATE: 10/08/2004
PATENT APPLICATION: US/10/509,599 TIME: 10:26:48

Input Set : D:\seqlist.txt

```
212 ccccggactg tggggcccca cctgttgctt accttttgag gtaattttgc aaatgtggtt 2100
213 tttttacttg gaaataactg cacatttata tataggatat tggactctgc ttagcatttt 2160
214 caagccacat agcatgactg ttttttgaat aggttggaat tgaaaaaaca attatcaaac 2220
215 gttaagaaca aagacaggga taaattgctt acatttcaac ctctagagat tgaggtaact 2280
216 ttttgtgtct gggtcttgtc aacatctaat ttttttccat ccattctgtt acactttgta 2340
217 ttttctaact ggagaaaaga gtgaggaaca gaatgtttta aatctggtgc aaaagaacta 2400
218 tatctgctgg atgagccttg aaagcagtct tggcctgtta gggcttacaa agtaaattac 2460
219 aaagtgatcc agttcaaagt ttgcttagtt acaacaaagc acctttaaaa aaaatacatt 2520
220 ttaaaaaaac attccaagcc aattggaaga catcattggg ttcttacttt aagacatctc 2580
221 ctggaataac tgttcaaatg caggttttag aaacaatgca ggaatcttgc tttaaagatg 2640
222 aaaaagggaa tgggccagct tcccttactc aaggagttga gggaccttgg aggatgaagg 2700
223 cgagtatgtg acactggaga aaagtggacc aggcatgtct tttgctttga tctggaggga 2760
224 gggctgcctg atgcaggccg gctcccagtg gggcaggcct cgctgcagaa tgcccagtag 2820
225 tactgcggcc aaggggacag ttaggagact tcatctaaag catgaaacct agctcctcta 2880
226 cacacaaatt cctatggaaa tacctttgtg tacagtgtct tacattttcc tattagtcag 2940
227 aaagaaggag agaatgagtg agtgcttgaa atgtgtcata ctgttttagg atcaagacta 3000
228 ggaattagga gccaggttga caaggacttt ttctgagagt tgggtgaggg taaagctttt 3060
229 ctataatcaa gctcaataca ccaaggaaac tggatccaga attcctaaac tttaaaatgg 3120
230 tactgtctgc ggagtggagt atggatggtt atgtcaaagt catagttcat cctatccaga 3180
231 tgtagcattc atggtaaact tttaagtgct aagcaaggaa ttatttactg attggtttta 3240
232 aagagagcag aaaacaccca agtgtagaat gtctactgtt tgctacctag aaatcttttc 3300
233 catteetett teatacatte caacceaetg gaagtettta gaggtatttt gatttaaagt 3360
234 atacttaaat taggatttct taaagaaaac atagggagaa aactttacat gcaattaaaa 3420
235 atggactttc ctgtgatttg tttttaatca ttcatttgga gaagaggcat gacctttgta 3480
236 tttcactaag tttaaagcaa gagcaactga tgattaaatg ttgcttttta ataaggtttt 3540
237 taacttgaaa atttgaaaat atttaatgtt gaaagacttc aattagggct attagagtta 3600
238 tatctccctg tcgtaggcag cttcttcgga gaagtgaaat ataacattac tcagtggacg 3660
239 gagaagtetg ttttgttaca gagacatgcc tetcagaagg teaggaggtt ttgagtacet 3720
240 atcettgeca cecatacagg aaatecaaag tttggtgtet etetetetet etgtetettt 3780
242 tgcaatcata ttctccctct gcttcttttc tcttctgccc tccttgtggg cagtcatgaa 3900
243 aatcaattca gactgtgttc attagcagat ttattattct attgagaaag cactggaatg 3960
244 ttttgtgaga ttatttttat atgaaggaat agcctgaact caaacagatg gtaagaatag 4020
245 tacaaacacc ttagcacatc actgcacaca cagtattctg aaaggagatt tgacacttaa 4080
246 ttcccatttt cttaaaataa cagttttgtt gacttaaaaa tatgagatac ataggatgtg 4140
247 aaaaaaaatg tttgcagtac tcagcaaaaa atagggtaca taaagcaggg tggctgtcca 4200
248 tecaetgatt etggggtgag aagegattte tacetegeaa gagtgaetag aaagttteta 4260
249 ggagcacete caggettgca aagaaagtga ggeetettgg tateetttee teagtgtgta 4320
250 tatgacagoc agtataatca atacoctagg ttatgogtot atatgatact catotgtgaa 4380
251 tattattggt tttgtaatct ttgttatata agaggatgtt taggctgtat atactggggt 4440
252 agattattgc ctgcccctta tacataggaa tatgctgcat aattgcgcat aacttccatc 4500
253 tcccttactg gcttgtaggc agaggaaact gtatatgtta ctgccttgta cttttctcat 4560
254 acaccaaaaa cacaccaaaa aaatcaataa aataagcaat cttctattct cattcctttt 4620
255 cccacagcag catattttag aggcacatac aaaacctaca ttctctagtt gggagtggat 4680
256 ttttaaagtt ttccttttat cttttatttt tttttttgta tgatgcactg agatgtgtac 4740
257 tttctaacag gggattggta cctaagaaac gtggtagcat tattcagaaa actattatac 4800
258 tttcaaatga cacatagtaa ggagaatgga ataatacatg ttgcatattt gttaccagtt 4860
259 gtaatttgtc tgtattatga aagatgtaat ggtttgtcag ctgtcactgt tgttttcttg 4920
260 taacatgata tggaataaag tatagcagaa tctccgg
```

VERIFICATION SUMMARY DATE: 10/08/2004
PATENT APPLICATION: US/10/509,599 TIME: 10:26:49

Input Set : D:\seqlist.txt

Output Set: N:\CRF4\10082004\J509599.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date